

SEQUENCE LISTING

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<120> ANALOGS OF CATIONIC PROTEINS

<130> A-411A US Revised073100

<140> 09/214,214

<141> 1998-12-23

<150> PCT/US97/12609

<151> 1997-07-17

<150> US 08/684,353

<151> 1996-07-19

<160> 12

<170> PatentIn Ver. 2.1

<210> 1

<211> 120

<212> PRT

<213> Human

<400> 1

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Ser	Glu	Ser	Leu	Trp	Val	Thr	Asp	Lys	Ser	Ser	Ala	Ile	Asp	Ile	Arg	20	25	30	
Gly	His	Gln	Val	Thr	Val	Leu	Gly	Glu	Ile	Lys	Thr	Gly	Asn	Ser	Pro	35	40	45	
Val	Lys	Gln	Tyr	Phe	Tyr	Glu	Thr	Arg	Cys	Lys	Glu	Ala	Arg	Pro	Val	50	55	60	
Lys	Asn	Gly	Cys	Arg	Gly	Ile	Asp	Asp	Lys	His	Trp	Asn	Ser	Gln	Cys	65	70	75	80
Lys	Thr	Ser	Gln	Thr	Tyr	Val	Arg	Ala	Leu	Thr	Ser	Glu	Asn	Asn	Lys	85	90	95	
Leu	Val	Gly	Trp	Arg	Trp	Ile	Arg	Ile	Asp	Thr	Ser	Cys	Val	Cys	Ala	100	105	110	
Leu	Ser	Arg	Lys	Ile	Gly	Arg	Thr	115	120										

<210> 2

<211> 360

<212> DNA

<213> Human

<400> 2

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gaaatcaaaa ccggttaactc tccggttaaa cagtacttct acgaaacccg ttgcaaagaa 180
gctgcaccgg ttgacaacgg ttgccgtggg atcgacgaca aacactggaa ctctcagtgc 240
aaaacctctc agacctacgt tcgtgctctg acctctgaaa acaacaagct tgttggttgg 300
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<210> 3

<211> 120

<212> PRT

<213> Human

<400> 3

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          20             25             30
Gly His Gln Val Thr Val Leu Gly Glu Ile Lys Thr Gly Asn Ser Pro
      35             40             45
Val Lys Gln Tyr Phe Tyr Glu Thr Arg Cys Lys Glu Ala Ala Pro Val
      50             55             60
Asp Asn Gly Cys Arg Gly Ile Asp Asp Lys His Trp Asn Ser Gln Cys
 65             70             75             80
Lys Thr Ser Gln Thr Tyr Val Arg Ala Leu Thr Ser Glu Asn Asn Lys
          85             90             95
Leu Val Gly Trp Arg Trp Ile Arg Ile Asp Thr Ser Cys Val Cys Ala
      100             105             110
Leu Ser Arg Lys Ile Gly Arg Thr
      115             120

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<210> 4

<211> 354

<212> DNA

<213> Human

<400> 4

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gaaatcaaaa ccggttaactc tccggttaaa cagtacttct acgaaacccg ttgcaaagaa 180
gctgcaccgg ttgacaacgg ttgccgtggg atcgacgaca aacactggaa ctctcagtgc 240
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354

<210> 5
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 Gly His Gln Val Thr Val Leu Gly Glu Ile Lys Thr Gly Asn Ser Pro
 35 40 45
 Val Lys Gln Tyr Phe Tyr Glu Thr Arg Cys Lys Glu Ala Ala Pro Val
 50 55 60
 Asp Asn Gly Cys Arg Gly Ile Asp Asp Lys His Trp Asn Ser Gln Cys
 65 70 75 80
 Lys Thr Ser Gln Thr Tyr Val Arg Ala Leu Thr Ser Glu Asn Asn Lys
 85 90 95
 Leu Val Gly Trp Arg Trp Ile Arg Ile Asp Thr Ser Cys Val Cys Ala
 100 105 110
 Leu Ser Arg Lys Ile Gly
 115

<210> 6
 <211> 119
 <212> PRT
 <213> Human

<400> 6
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 Glu Ser Leu Trp Val Thr Asp Lys Ser Ser Ala Ile Asp Ile Arg Gly
 20 25 30
 His Gln Val Thr Val Leu Gly Glu Ile Lys Thr Gly Asn Ser Pro Val
 35 40 45
 Lys Gln Tyr Phe Tyr Glu Thr Arg Cys Lys Glu Ala Ala Pro Val Asp
 50 55 60
 Asn Gly Cys Arg Gly Ile Asp Asp Lys His Trp Asn Ser Gln Cys Lys
 65 70 75 80

Thr Ser Gln Thr Tyr Val Arg Ala Leu Thr Ser Glu Asn Asn Lys Leu
85 90 95

Val Gly Trp Arg Trp Ile Arg Ile Asp Thr Ser Cys Val Cys Ala Leu
100 105 110

Ser Arg Lys Ile Gly Arg Thr
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<210> 7
<211> 117
<212> PRT
<213> Human

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<400> 7
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      20                    25             30
His Gln Val Thr Val Leu Gly Glu Ile Lys Thr Gly Asn Ser Pro Val
     35                     40           45
Lys Gln Tyr Phe Tyr Glu Thr Arg Cys Lys Glu Ala Ala Pro Val Asp
    50                   55             60
Asn Gly Cys Arg Gly Ile Asp Asp Lys His Trp Asn Ser Gln Cys Lys
   65                 70       75
Thr Ser Gln Thr Tyr Val Arg Ala Leu Thr Ser Glu Asn Asn Lys Leu
          85               90         95
Val Gly Trp Arg Trp Ile Arg Ile Asp Thr Ser Cys Val Cys Ala Leu
        100            105          110
Ser Arg Lys Ile Gly
      115
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<210>	8
<211>	120
<212>	PRT
<213>	Human

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<400> 8
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      20          25          30
Ser Gly Gly Thr Val Thr Val Leu Glu Lys Val Pro Val Ser Lys Gly
      35          40          45

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Gln Leu Lys Gln Tyr Phe Tyr Glu Thr Lys Cys Asn Pro Met Gly Tyr
 50 55 60
 Thr Lys Glu Gly Cys Arg Gly Ile Asp Lys Arg His Trp Asn Ser Gln
 65 70 75 80
 Cys Arg Thr Thr Gln Ser Tyr Val Arg Ala Leu Thr Met Asp Ser Lys
 85 90 95
 Lys Arg Ile Gly Trp Arg Phe Ile Arg Ile Asp Thr Ser Cys Val Cys
 100 105 110
 Thr Leu Thr Ile Lys Arg Gly Arg
 115 120

<210> 9
 <211> 120
 <212> PRT
 <213> Human

<400> 9
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 Ser Gly Gly Thr Val Thr Val Leu Glu Lys Val Pro Val Ser Lys Gly
 35 40 45
 Gln Leu Lys Gln Tyr Phe Tyr Glu Thr Lys Cys Asn Pro Met Gly Tyr
 50 55 60
 Thr Asp Glu Gly Cys Arg Gly Ile Asp Asp Arg His Trp Asn Ser Gln
 65 70 75 80
 Cys Arg Thr Thr Gln Ser Tyr Val Arg Ala Leu Thr Met Asp Ser Ala
 85 90 95
 Lys Ala Ile Gly Trp Arg Phe Ile Arg Ile Asp Thr Ser Cys Val Cys
 100 105 110
 Thr Leu Thr Ile Lys Arg Gly Arg
 115 120

<210> 10
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 <212> PRT
 <213> Human

<400> 10
 Met His Ser Asp Pro Ala Arg Arg Gly Glu Leu Ser Val Cys Asp Ser
 1 5 10 15


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Ile Ser Glu Trp Val Thr Ala Ala Asp Lys Lys Thr Ala Val Asp Met
      20                      25                      30
Ser Gly Gly Thr Val Thr Val Leu Glu Lys Val Pro Val Ser Lys Gly
      35                      40                      45
Gln Leu Lys Gln Tyr Phe Tyr Glu Thr Lys Cys Asn Glu Met Gly Tyr
      50                      55                      60
Thr Asp Glu Gly Cys Arg Gly Ile Asp Asp Arg His Trp Asn Ser Gln
      65                      70                      75                      80
Cys Arg Thr Thr Gln Ser Tyr Val Arg Ala Leu Thr Met Asp Ser Ala
      85                      90                      95
Lys Arg Ile Gly Trp Arg Phe Ile Arg Ile Asp Thr Ser Cys Val Cys
      100                     105                     110
Thr Leu Thr Ile Lys Arg Gly Arg
      115                     120

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<210> 11

<211> 663

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Hybrid of
bacterial (E. coli) and human (Homo sapiens)
sequence.

<400> 11

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ctgagtagga caaatccgcc gggagcggat ttgaacgttg cgaagcaacg gccggagggt 180
ggcgggcagg acgcccggca taaactgcc aagcatcaa atagcagaag ccacccctgac 240
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tggacgtctc ataattttta aaaaattcat ttgacaaatg ctaaaattct tgattaatat 360
tctcaattgt gagcgtcac aatttatcga tttgattcta gatttgagtt ttaactttta 420
gaaggaggaa taacatatgg ttaacgcgtt ggaattcgag ctactagtg tcgacctgca 480
gggtaccatg gaagcttact cgaggatccg cggaaagaag aagaagaaga agaaagcccg 540
aaaggaagct gagttggctg ctgccaccgc tgagcaataa ctagcataac cccttggggc 600
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663

<210> 12

<211> 665

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Hybrid of
bacterial (E. coli) and human (Homo sapiens)
sequence.

<400> 12

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tcgggctttc ttcttcttct tcttctttcc gcggatcctc gagtaagctt ccatggtacc 180
ctgcaggtcg acactagtga gctcgaattc caacgcgtta accatatgtt attcctcctt 240
ctaaaagtta aaactcaaat ctagaatcaa atcgataaat tgtgagcgct cacaattgag 300
aatattaatc aagaatttta gcatttgtca aatgaatttt ttaaaaatta tgagacgtcc 360
atatttgaat gtattagaaa aataaacaaa agagtttgta gaaacgcaaa aaggccatcc 420
gtcaggatgg ccttctgctt aatttgatgc ctggcagttt atggcgggcg tctgcccgc 480
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ggagagcgtc accgacaaac aacagataaa acgaaaggcc cagtctttcg actgagcctt 600
tcgttttatt gatgcctggc agttccctac tctcgcatgg ggagaccatg catacgttac 660
gcacg
665

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